

Work Order ID 144942

Wednesday, April 27, 2016 3:16:19 PM

144942

Page 1

Item ID: D4785-5

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Rib

Start Date: 4/27/2016 Start Qty: 1200

Required Date: 5/11/2016 Req'd Qty: 1200

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: MCS Date: APR 28 2016

Tooling:

Date:

Run Start ***NR1***

QC: Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4785	B

100 0.00

100

Large Fab

Memo

1.68

Large Fab

1- Cut tube as per dwg D4785
2- remove identification marks and deburr

3 16-05-12

110 QC6- Inspect dimensions to drawing 0.00

110

QC

Memo

0.00

Quality Control

3x DAS **43** MAY 18 2016
9-89

120 Identify as per dwg & Stock Location: WNA 04 0.00

120

Packaging

Memo

0.12

Packaging

LOCATION: WA004

3x DAS **43** MAY 18 2016
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 144942

Wednesday, April 27, 2016 3:16:19 PM

144942

Page 2

Item ID: D4785-5

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Rib

Stop ***NS2***

Start Date: 4/27/2016 Start Qty: 12.00

12

Cust Item ID:

Required Date: 5/11/2016 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

1.20

Quality Control

16/5/19 [Signature]
mf
16-5-18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 27, 2016 3:16:26 PM

Page 1

Work Order ID: 144942

Parent Item: D4785-5

Parent Item Name: Rib

144942

D4785-5

Start Date: 4/27/2016

Required Date: 5/11/2016

Start Qty: 12.00

Required Qty: 12.00

Comments:

IPP REV:A 13.03.14 NEW ISSUE VERF:JLM
13.06.21 DWG REV.B DD VERF:JFS

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TS0.500W.049		Purchased	No			100	f	1,415.314	1.673	21.13263			

M304TS0 500W 049

Square Tubing

** 22
M134104 C 16-05-17

Location

WA004

Loc Qty

1415.31421

M134104

185.31421

M134486

650

M134618

580

Loc Code

- 5.3

DQA: _____ Date: _____



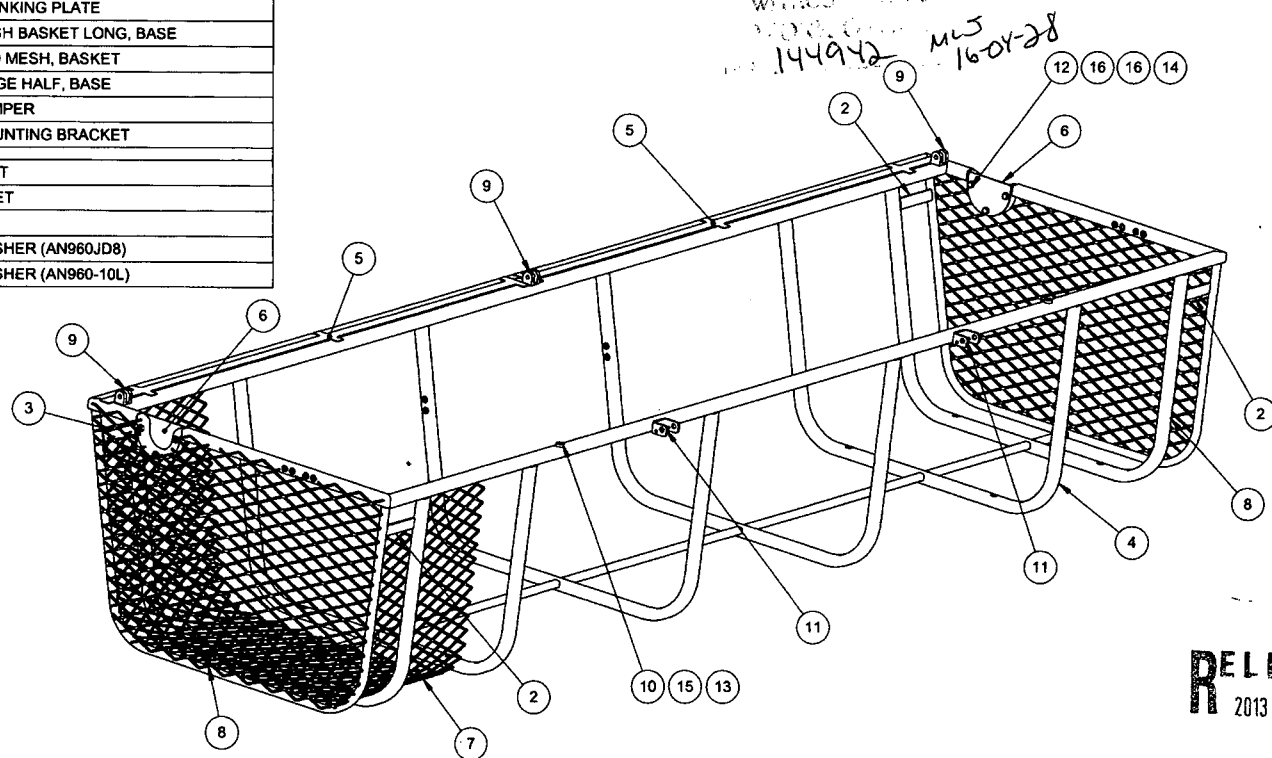
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4785-041	LONG BASKET BASE ASSY, LH/RH
2	3	D4793-1	HANDLE PLATE
3	1	D4793-3	WIDE HANDLE PLATE
4	1	D4785-101	TUBULAR ASSEMBLY, LH/RH
5	2	D4672-1	BLANKING PLATE
6	2	D4021-5	BLANKING PLATE
7	1	D4020-1	MESH BASKET LONG, BASE
8	2	D4020-11	END MESH, BASKET
9	3	D4016-1	HINGE HALF, BASE
10	2	D2931	BUMPER
11	2	D2581	MOUNTING BRACKET
12	6	AN3-10A	BOLT
13	2	MS20600AD4W3	RIVET
14	6	MS21042L3	NUT
15	2	NAS1149DN832J	WASHER (AN960JD8)
16	12	NAS1149F0332P	WASHER (AN960-10L)

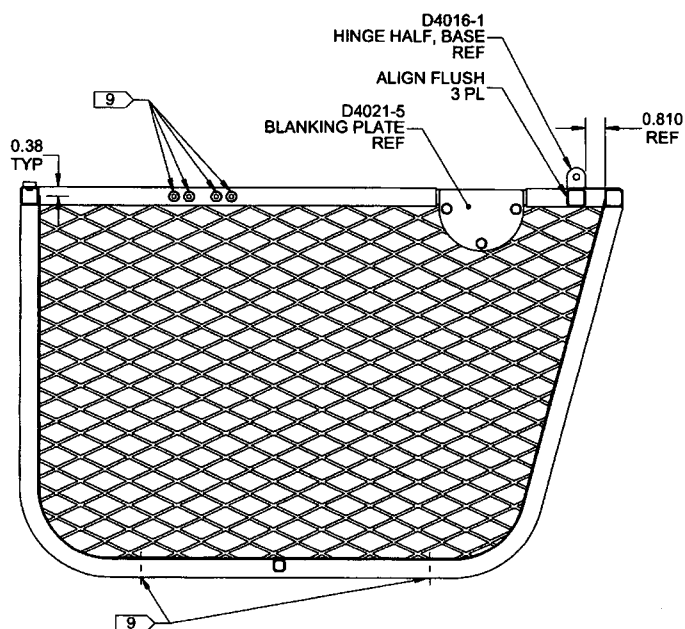


D4785-041 LONG BASKET BASE ASSY, LH/RH

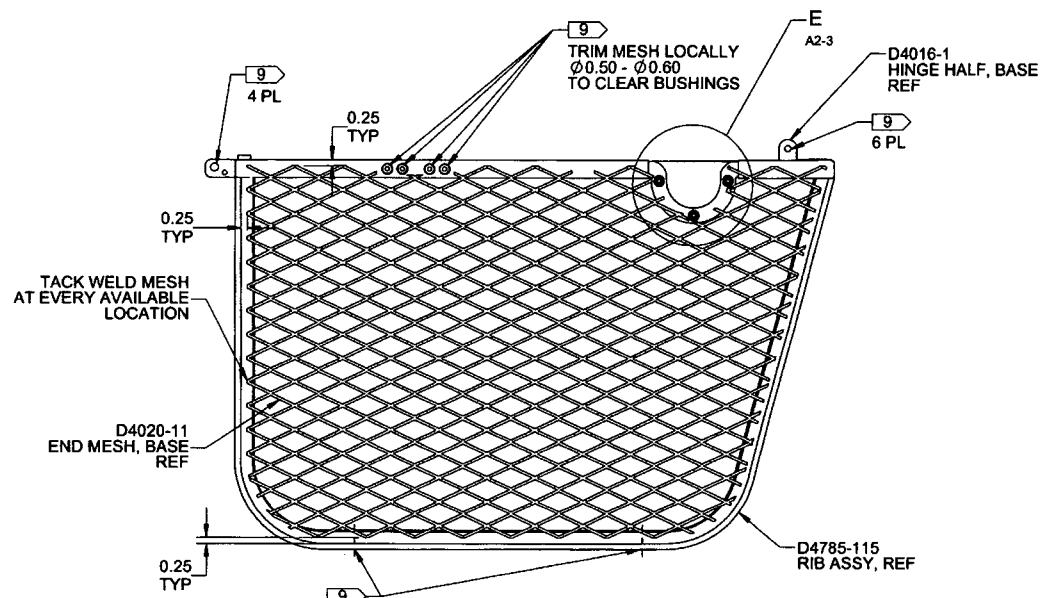
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 50.42 lbs APPROX
- 8) INSTALL AFTER FINISH
- 9) MASK HOLES PRIOR TO POWDER COAT
- 10) WELD PER DART QSI 004

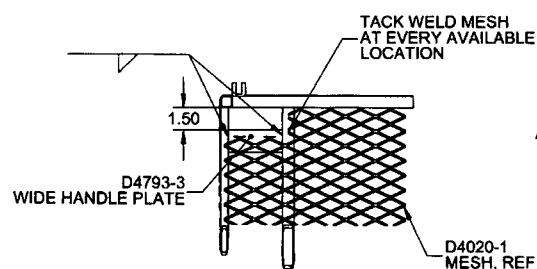
B	REPLACE D3916-5 WITH D4785-117 (ZN B5-4, B4-4, B5-7); REVISE D4785-5 DIMENSION (ZN B5-5)	RF	13.06.11
A	NEW ISSUE	RF	13.05.24
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	REV. B	
CHECKED	DC	DRAWING NO. D4785 SHEET 1 OF 7	
MFG. APPR.	DS	TITLE LONG BASKET BASE ASSY NTS	
APPROVED	DS	SCALE	
DE APPR.	DS	DATE 13.06.11	
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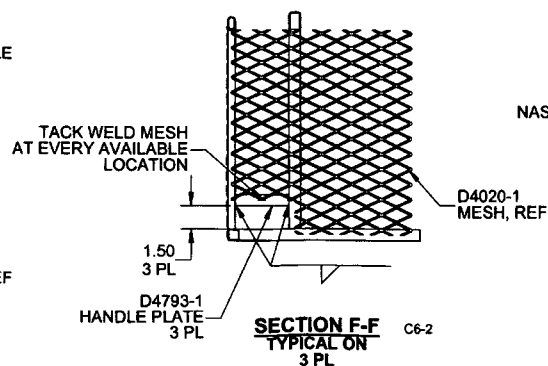
SECTION A-A B7-2



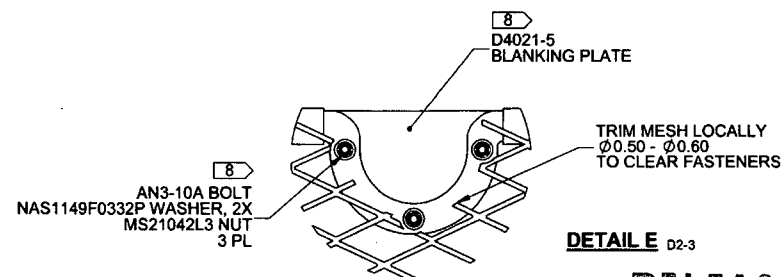
SECTION VIEW B-B A2-2



SECTION D-D D6-2



SECTION F-F C6-2
TYPICAL ON
3 PL

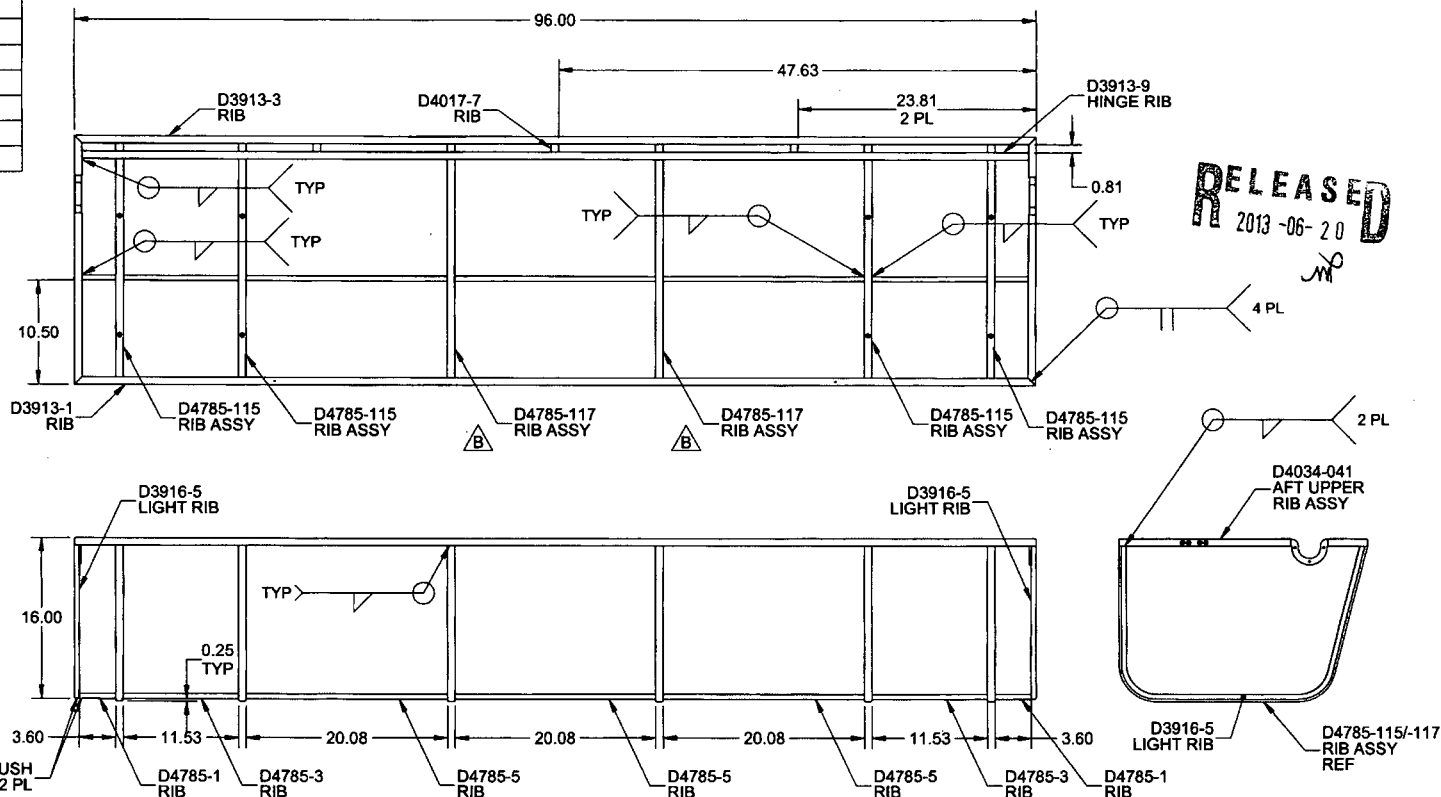


DETAIL E D2-3

RELEASED
2013-06-20

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO.	REV. B
MFG. APPR.	D	D4785	SHEET 3 OF 7
APPROVED	#	TITLE	SCALE
DE APPR.	#	LONG BASKET BASE ASSY	NTS
DATE	13.06.11	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	X	D4785-101	TUBULAR ASSEMBLY
2	2	D4785-1	RIB
3	3	D4785-5	RIB
4	4	D4785-115	RIB ASSEMBLY
5	2	D4785-117	RIB ASSEMBLY
6	2	D4785-3	RIB
7	3	D4017-7	RIB
8	1	D4034-041	AFT UPPER RIB ASSY
9	1	D4034-043	FWD UPPER RIB ASSY
10	2	D3916-5	RIB, LIGHT
11	1	D3913-1	RIB
12	1	D3913-3	RIB
13	1	D3913-9	HINGE RIB

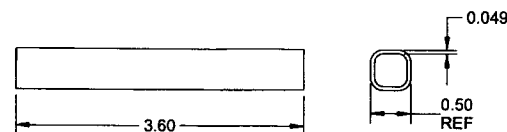


NOTES:

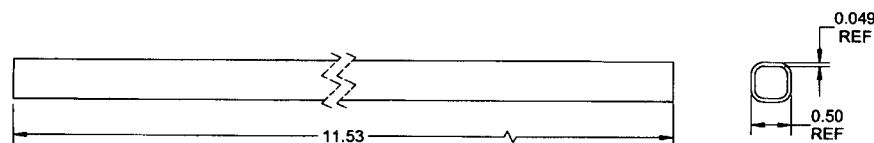
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 28.65 lbs
- 8) WELD PER DART QSI 004

D4785-101 TUBULAR ASSEMBLY, LH/RH

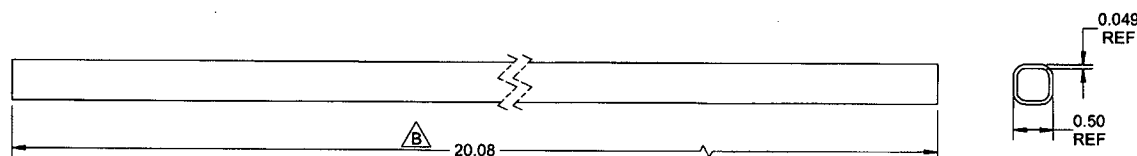
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4785 TITLE LONG BASKET BASE ASSY COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.
DRAWN	RF	
CHECKED	DC	
MFG. APPR.	NS	
APPROVED	SE	
DE APPR.	SE	REV. B SHEET 4 OF 7 SCALE NTS
DATE	13.06.11	



D4785-1 RIB



D4785-3 RIB



D4785-5 RIB

NOTES:

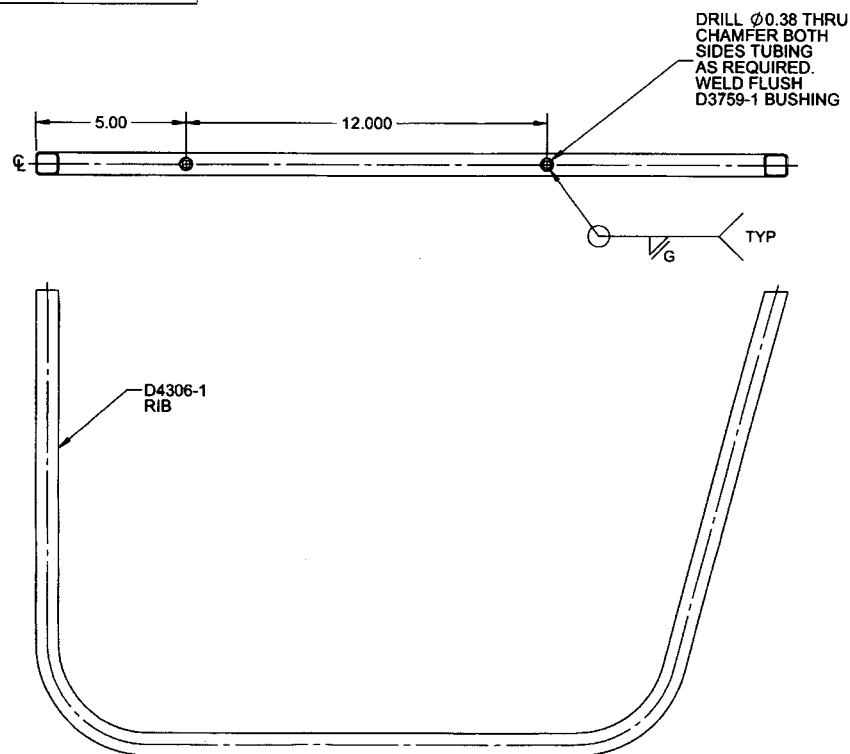
- 1) MATERIAL: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 x 0.50 x 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.500W.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS

RELEASED
2013-06-20
MT

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>BC</i>	DRAWING NO. D4785	REV. B
MFG. APPR.	<i>[Signature]</i>	SHEET 5 OF 7	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	LONG BASKET BASE ASSY	
DATE	13.06.11	NTS	

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ITEM NO.	QTY. -115	PART NUMBER	DESCRIPTION
1	X	D4785-115	RIB ASSEMBLY
2	1	D4306-1	RIB
3	2	D3759-1	BUSHING



D4785-115 RIB ASSEMBLY
MAKE FROM D4306-1 RIB

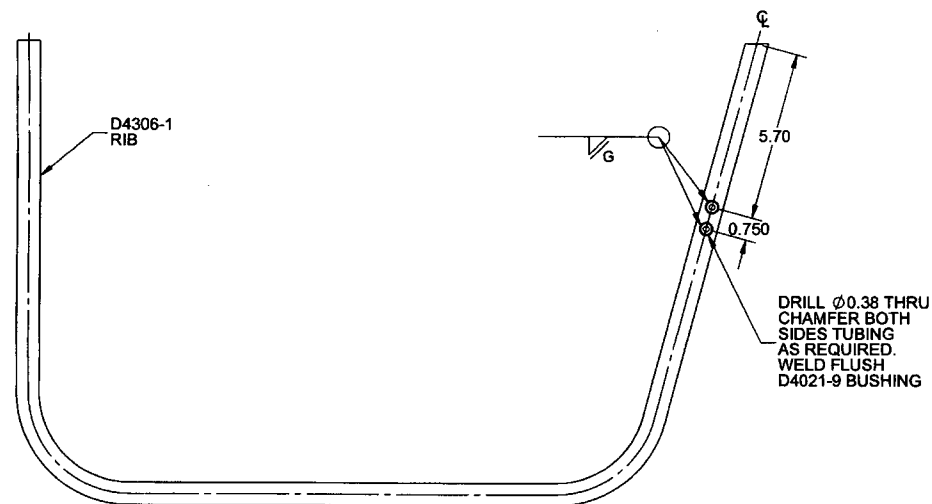
NOTES:

- 1) MATERIAL: D4306-1 RIB
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.80 lbs
- 8) WELD PER DART QSI 004

RELEASED
2013-06-20
JND

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	JC	DRAWING NO. D4785	REV. B
MFG. APPR.	J	TITLE LONG BASKET BASE ASSY	SHEET 6 OF 7
APPROVED	J	SCALE	NTS
DE APPR.	J	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	13.06.11		

ITEM NO.	QTY. -117	PART NUMBER	DESCRIPTION
1	X	D4785-117	RIB ASSEMBLY
2	1	D4306-1	RIB
3	2	D4021-9	BUSHING



D4785-117 RIB ASSEMBLY
MAKE FROM D4306-1 RIB

NOTES:

- 1) MATERIAL: D4306-1 RIB
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.81 lbs
- 8) WELD PER DART QSI 004

RELEASE
2013-06-20

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. D4785	REV. B
MFG. APPR.		TITLE	SHEET 7 OF 7
APPROVED		LONG BASKET BASE ASSY	SCALE
DE APPR.			NTS
DATE	13.06.11	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	